

Please AMEND the paragraph beginning at page 8, lines 28 to 36, as follows:

Q2
In FIG. 6, this driver circuit comprises : a fixed bias current supply section 10 serving as first bias current supply means that applies a fixed bias current I_{b1} (first bias current) to a semiconductor laser (LD) 100, a burst data processing section 20 serving as signal processing means that generates, based on burst data (a data signal) from outside, a pre-bias signal S_b corresponding to a second bias current control signal and a pulse signal S_p corresponding to a pulse current control signal, a pulse current supply section 30 serving as pulse current supply means that applies to the LD 100 a pulse current I_p generated in accordance with the pulse signal S_p , and a pre-bias current supply section 40 serving as second bias current control means that applies to the LD 100 a pre-bias current I_{b2} (second bias current) generated in accordance with the pre-bias signal S_b .

Please AMEND the paragraph beginning at page 10, lines 31 to page 11, line 3, as follows:

Q3
At first, when the LD driving circuit is activated, the fixed bias current supply section 10 is operated and the fixed bias current I_{b1} is supplied to the LD 100. This fixed bias current I_{b1} is for previously supplying a bias current permitted on the system to the LD 100 when an optical output is not being emitted. Therefore, this must be set to a current value as close as possible to zero (for example, about several $10\mu A - 1\mu A$) within the spontaneous emission area of the LD 100. As shown in FIG. 9, if the current value I_{b1} is considered as a voltage applied to the LD 100, although the current value I_{b1} is small, it is required to direct an attention to that a voltage V_{b1} of a comparatively large value is applied to the LD 100.

Please AMEND the paragraph beginning at page 11, lines 29 to line 31, as follows:

Q4
As shown in FIG. 11, in the burst data processing section 20, the input burst data is respectively input to a delay circuit 21, a rise detection circuit 22 and a continuous zero detection circuit 23. In the delay circuit 21, the burst data is delayed (shifted) by a time corresponding to two cell lengths + a pre-bias bit portion, and the pulse signal S_p as shown in (B) of FIG. 10 is output. The abovementioned pre-bias bit specifies how fast the pre-bias signal S_b rises with respect to the rise of the pulse signal S_p , being a value which is previously set corresponding to the operating characteristics and the like of the LD 100.

Please AMEND the paragraph beginning at page 12, lines 12 to page 21, line 3, as follows:

Furthermore, in the continuous zero detection circuit 23, counting of the number of continuous zero levels in the input burst data is performed using a counter or the like. For example, when the number of continuous zeros corresponding to one cell length is detected, a short pulse as shown in (E) of FIG. 10 is output. Then, an output signal from the continuous zero detection circuit 23 is sent to a delay circuit 25 and delayed by a time corresponding to one cell length + a pre-bias bit portion, and a signal as shown in (F) of FIG. 10 is output from the delay circuit 25. Next, the output signal from the delay circuit 25 is sent to a reset input terminal R of the latch circuit 26, and the output from the latch circuit 26, that is, the pre-bias signal S_b shown in (G) of FIG. 10, is reset from the high level to the low level.

Please DELETE the header on page 21, line 13:

IN THE CLAIMS:

Please AMEND the following claims:

1. (ONCE AMENDED) A driver circuit for driving a semiconductor laser in accordance with a data signal including data generated in bursts, comprising:

first bias current supply means for generating, at least at a time of non-output of data, a first bias current for driving the semiconductor laser in a predetermined area within a spontaneous emission area, to supply the first bias current to the semiconductor laser;

signal processing means for generating a pulse current control signal in which the data signal is delayed, using only the data signal, and generating a second bias current control signal that rises more rapidly by a predetermined time than the rise of the burst data included in the pulse current control signal;

pulse current supply means for generating a pulse current in accordance with the pulse current control signal generated in said signal processing means, to supply the pulse current to the semiconductor laser; and

second bias current supply means for generating a second bias current for driving the semiconductor laser in a predetermined area within the spontaneous emission area in